

R E M A R K S

Claims 1-43 are presently pending in this application. Claims 20, 26 and 28 are rejected under 35 U.S.C. §112, second paragraph. Claims 1-37 are rejected under the judicially created doctrine of double patenting. Claims 1, 2, 4-9, 11, 14-17, 19-22 and 24 are rejected under 35 U.S.C. §102(b).

Applicants have amended claim 26 to more particularly point out and distinctly claim the invention. In addition, claims 1-24 have been canceled and new claims 44-91 added. The new claims are believed to more particularly point out and distinctly claim the invention. No new matter is introduced by the amended claims and the claims are fully supported by the instant specification. For reasons detailed below, the rejections should be withdrawn and the claims allowed to issue. Entry of the foregoing amendments is respectfully requested.

1. Oath and Declaration

The Examiner has indicated that the Declaration and Power of Attorney is defective because non-initialed and/or non-dated alterations have been made to the document. Specifically, the serial number of the provisional application on page 2 has been altered. Applicants submit herewith an unaltered copy of the Declaration and Power of Attorney.

2. Drawings

The drawings are objected to by the Examiner for the reasons indicated on the included PTO-948. In response, Applicants submit herewith a set of drawings which address the comments indicated on the PTO-948 form.

3. Claim Objection

Claim 26 objected to by the Examiner because the claim contains editor's markings. In response, Applicants submit herewith a clean copy of the claim.

4. The Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 20, 26 and 28 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

According to the Examiner, Claim 20 is indefinite in the recitation of "the translatable protein product." There is no antecedent basis for the phrase in claims 16 or 17, from which claim 20 depends. Amending the claim such that it depends from claim 19 would be remedial.

The Examiner maintains that Claim 26 is indefinite in the recitation of "the target binding domain" because there is no antecedent basis for the limitation in the claim. Claim 26 is additionally indefinite in being directed to a process which omits a step (*i.e.*, step b). Claim 28 is indefinite insofar as it depends from claim 26.

In response, Applicants have canceled claim 20 and replaced it with new claim 87 which depends from new claim 86. Antecedent basis for the phrase "the translatable protein product" can be found in new claim 86.

Additionally, claim 26 has been amended to delete the phrase "the target binding domain."

The claim rejections are obviated by the amendments to the claims.

5. Double Patenting Rejections

Claims 1-27, 29-34, 36 and 37 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 9-16, 18-21, 23, 25 and 32-34 of U.S. Patent No. 6,013,487. Although the conflicting claims are not identical, they are not patently distinct from each other.

Claims 25-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 7-13, 15, 25-30, 32 and 33 of U.S. Patent No. 6,083,702.

Applicants will submit a terminal disclaimer, if appropriate, once Applicants have successfully overcome the rejections, discussed below, and the Examiner has indicated allowance of claims.

6. The Claims Are Not Anticipated

Claims 1, 4, 6, 8, 11, 14-16, 19-21 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Puttaraju *et al.* (1999, *Nat. Biotechnol.* 17:246-252; "Puttaraju").

According to the Examiner, Puttaraju teaches a nucleic acid molecule comprising a target binding domain 18 nucleotides in length, a 3' splice region comprising a branchpoint, a pyrimidine tract and a 3' splice acceptor site, a spacer region that separates the 3' splice region from the target binding domain, and a nucleotide sequence to be *trans*-spliced. In addition, the Examiner maintains that in Figure 2 and the caption thereto, Puttaraju teaches that the specificity of *trans*-splicing is improved by the inclusion of a safety sequence.

Further, the Examiner alleges that on page 249, second column, Puttaraju teaches a cell comprising a vector which expresses the nucleic acid molecule, and in the section bridging

pages 249 and 250, Puttaraju teaches a method of producing a chimeric RNA molecule in a cell comprising contacting a target pre-mRNA in the cell with a nucleic acid molecule. The Examiner asserts that Puttaraju further teaches a nucleic acid molecule further comprising sequences encoding a translatable protein product and comprising a sequence encoding a toxin. The Examiner alleges that Puttaraju teaches each of the limitations of the claimed invention and, therefore, the claims are anticipated by Puttaraju.

Claims 1, 2, 4-9, 11, 12, 14-17, 19, 20-22 and 24 are rejected under 35 U.S.C. §102(b) as being anticipated by Mitchell (WO 97/22250; "Mitchell"). According to the Examiner, Mitchell teaches a nucleic acid molecule comprising a target binding domain of at least 15-30 and up to several hundred nucleotides in length, a safety sequence, a 3' splice region comprising a branchpoint, a pyrimidine tract and a 3' splice acceptor site, a spacer region that separates the 3' splice region from the target binding domain, and a nucleotide sequence to be *trans*-spliced. Thus, according to the Examiner, Mitchell teaches all of the limitations of independent claims 1, 8, 11, 16 and 21 and dependent claims 4 and 24. The Examiner alleges that Mitchell further teaches the nucleic acid molecule which further comprise sequences encoding a translatable protein product, comprising a sequence encoding a toxin, and comprising a translational stop codon.

Applicants have canceled claims 1-24 and replaced them with new claims 44-91. New claims 44-67 refer to nucleic acid molecules comprising "one or more target binding domains wherein said target binding domain is (i) *between 201 and 600 nucleotides in length; or (ii) between 10 and 14 nucleotides in length.*" Applicants assert that neither Puttaraju, nor Mitchell, disclose such target binding domains.

New claims 68-91 refer to nucleic acid molecules comprising "one or more target binding domains wherein said target binding domain is between 15 and 200 nucleotides in length." For such claimed subject matter Applicants claim priority back to their earlier filed cases. As indicated by the Examiner, the Mitchell reference which was cited as prior art against the claims of the present application and to which priority is claimed, discloses "a nucleic acid molecule comprising a target binding domain of at least 15-30 and up to several hundred nucleotides in length."

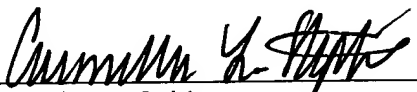
For all the foregoing reasons, the cited references do not render the claims anticipated, therefore, the rejections should be removed.

Conclusion

In view of the foregoing, we respectfully submit that all pending claims are allowable over the prior art and that the application is otherwise in condition for allowance in all respects.

Respectfully submitted,

Dated: November 20, 2003


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